



# TUFF COUNTRY

## EZ-RIDE SUSPENSION

# INSTALLATION MANUAL

## FORD F250

### 1980 - 1996

### PART # F2502B

SJ090800

**WARNING: TUFF COUNTRY EZ-RIDE SUSPENSION HIGHLY RECOMMENDS THAT A CERTIFIED MECHANIC PERFORM THIS INSTALLATION.**

PART NO. F2502B  
1980 - 1996 F250 2.5" LIFT  
PARTS LIST:

Qty.	Description	Part No.
1	Driver Side Axle Pivot Bracket (Rear)	F2502-01
1	Pass. Side Axle Pivot Bracket (Front)	F2502-02
2	7/16" Centering Bolt with Nut	CB7161
2	9/16" x 3 1/2" Cam Bolt	CAM-01
4	Cam Washers	CAM-02
2	9/16" U-nut Nuts	916UN
2	Rear add-a-leafs	TCI-R22
2	3/8" Centering Bolt and nuts	CB381
4	9/16" x 3" x 10" Square U-bolts	5U-2510S
1	9/16" U-bolt High Nuts and Washers	916NW
1	Instruction Sheet	F2502-INST

**Special Note:** This box kit includes front and rear axle pivot brackets, front U-bolts, rear add-a-leafs and necessary hardware. Tuff Country offers two styles of front progressive add-a-leaf springs, a gas engine spring and a diesel engine spring. If you have not already ordered your front springs, please contact Tuff Country or your local Tuff Country dealer and order (2) TCI-F2502E (Gas Engine Springs) or (2) TCI-F2502H (Diesel Engine Springs). Longer shocks will be needed after suspension system has been installed.

Refer to the last page of the installation manual for parts description.

**Congratulations** on your selection to purchase a Tuff Country Suspension System. We at Tuff Country are proud to offer a high quality product at the industries most competitive pricing. Thank you for your confidence in us and our product.

**\*Important Notes:** Please read before beginning installation. OEM Manual should be used as a reference.

TUFF COUNTRY SUSPENSION highly recommends a qualified and or certified mechanic to perform this installation.

Check off parts to be sure that all parts are on hand. If any parts are missing, Please call us @ (800) 288-2190

Use locktite on all bolts associated with this installation.

### IMPORTANT CUSTOMER INFORMATION

This vehicles reaction and handling characteristics may differ from standard cars and/or trucks. Modifications to improve and or enhance off road performance may raise the intended center of gravity. Extreme caution must be utilized when encountering driving conditions which may cause vehicle imbalance or loss of control. **Drive Safely!** Avoid abrupt maneuvers, such as sudden sharp turns which could cause a roll over, resulting in serious injury or death.

It is the customers responsibility to make sure a re-torque is performed on all hardware associated with this suspension system after the first 100 miles of installation. It is also the customers responsibility to do a complete re-torque after every 1000 miles or after every off road use.

After the original installation, Tuff Country also recommends having the alignment checked every 6 months to ensure proper tracking, proper wear on tires and front end components. Tuff Country takes no responsibility for abuse, improper installation, or improper suspension maintenance.

### IMPORTANT NOTICE

**DO NOT** install a body lift in combination with a suspension system. If a body lift is used in conjunction with any Tuff Country Suspension product, your Tuff Country WARRANTY WILL BE VOID.

### NOTICE

It is the responsibility of the customer or the mechanic to wear safety glasses at all times when working with air tools.

### Torque Settings:

5/16"	15-18 ft. lbs.	3/8"	28-32 ft.lbs.
7/16"	30-35 ft. lbs.	1/2"	65-85 ft. lbs.
9/16"	75-90 ft. lbs	5/8"	85-110 ft. lbs.

## Please Follow Instruction Carefully

Before installation begins, drive and check to make sure there are not any uncommon sounds and or frame damage. Also at this time measure from the center of the hub to the bottom of fender well and record measurements below.

### Pre Installation Measurements:

Driver Side Front \_\_\_\_\_  
Passenger Side Front \_\_\_\_\_  
Driver Side Rear \_\_\_\_\_  
Passenger Side Rear \_\_\_\_\_

At the end of the installation take the same measurements and compare to the pre installation measurements.

### Post Installation Measurement:

Driver Side Front \_\_\_\_\_  
Passenger Side Front \_\_\_\_\_  
Driver Side Rear \_\_\_\_\_  
Passenger Side Rear \_\_\_\_\_

### Front End Installation:

1. To begin installation, block the rear tires of the vehicle so that the vehicle is stable and can't roll backwards. Safely lift the front of the vehicle and support the frame with jack stands. Place jack stands on both the driver and the passenger side. Next remove the wheels, tires and shock absorbers from both sides.

2. Remove the anti-sway bar from frame location, if so equipped.

3 Place hydraulic floor jack under front axle and raise up until jack comes into contact with the front axle. Remove the stock axle pivot bolt that hold the front axle into the stock location and discard the stock bolt.

4. Working on the driver side of the vehicle, remove the stock front U-bolts from the stock spring pack and discard. Lower hydraulic floor jack allowing the stock axle to pull away from the stock spring pack. Also at this time, make sure the axle pulls away from the axle pivot bracket.

5. Remove the stock front axle pivot bracket from stock location and save stock hardware. Stock bracket may be discarded. Locate the new front axle pivot bracket and install into stock location using stock hardware.

(See Illustration # 1)

6. Place a pair of "C" clamps around stock springs about 4" from the centering bolt. One on each side, carefully remove the stock centering bolt and discard. Carefully

remove the "C" clamps from stock spring assembly.

7. Locate the (1) new front progressive add-a-leaf springs and remove the centering bolt that holds new spring pack together. Discard this bolt. **Special Note: The longest add-a-leaf in the new spring assembly has spring clamps on each end. These spring clamps need to be turned 90 degrees so that they can be bent around stock spring assembly once new spring assembly is installed.**

(See Illustration # 2)

8. Locate (1) 7/16" x 6" Centering bolt and nut. Place new spring pack under stock springs. **Special Note: The long end of the new spring will be installed towards the rear of the vehicle and the bend of the spring pack will be installed towards the front of the vehicle.** Secure new progressive add-a-leaf spring pack to stock springs with new 7/16" centering bolt and nut, tighten centering nut. With a suitable cutting tool, cut off excess bolt. **Special Note: Do not use an impact wrench on the new centering bolt., If an impact wrench is used, the new centering bolt may strip.**

(See Illustration # 3)

9. Locate (2) 9/16" x 3" x 10" Square U-bolts, (4) 9/16" U-bolt high nuts and (4) 9/16" U-bolt washers. Install new U-bolts into stock location and torque to 95 ft.lbs.

(See Illustration # 3)

10. Locate (1) 9/16" x 3 1/2" Cam bolt, (2) Cam Washers and (1) 9/16" U-nut. Carefully raise up on hydraulic jack until front axle slides up into the newly installed front axle pivot bracket and secure using new 9/16" cam bolt and hardware. **Special Note: For now, adjust cam bolt to the center position. The alignment shop will align to proper specs.**

(See Illustration # 4)

11. Install new shock absorbers and shock boot. Part # SL234 for vehicle manufactured from 1980 -1986. Part # LL234 for vehicle manufactured from 1987 - 1996. **Special Note: Shocks are not included.**

12. Place hydraulic floor jack under rear axle and raise up until jack comes into contact with the rear axle. Remove the stock axle pivot bolt that holds the rear axle into the stock location and discard the stock bolt.

13. Working on the passenger side of the vehicle, remove the stock front U-bolts from the stock spring pack and discard. Lower down on the hydraulic floor jack allowing the stock axle to pull away from the stock spring pack. Also at this time, make sure the axle pulls away from the axle pivot bracket.

14. Remove the stock rear axle pivot bracket from stock location and save stock hardware. Stock bracket may be discarded. Locate the new rear axle pivot bracket and install into stock location using stock hardware.

(See Illustration # 5)

## Rear End Installation

15. Place a pair of "C" clamps around stock springs about 4" from the centering bolt. One on each side, carefully remove the stock centering bolt and discard. Carefully remove the "C" clamps from stock spring assembly.

16. Locate the (1) new front progressive add-a-leaf springs and remove the centering bolt that holds new spring pack together. Discard this bolt. **Special Note: The longest add-a-leaf in the new spring assembly has spring clamps on each end. These spring clamps need to be turned 90 degrees so that they can be bend around stock spring assembly once new spring assembly is installed.**

(See Illustration # 6)

17. Locate (1) 7/16" x 6" Centering bolt and nut. Place new spring pack under stock springs. **Special Note: The long end of the new spring will be installed towards the rear of the vehicle and the bend of the spring pack will be installed towards the front of the vehicle.** Secure new progressive add-a-leaf spring pack to stock springs with new 7/16" centering bolt and nut, tighten centering nut. With a suitable cutting tool, cut off excess bolt. **Special Note: Do not use an impact wrench on the new centering bolt., If an impact wrench is used, the new centering bolt may strip.**

(See Illustration # 7)

18. Locate (2) 9/16" x 3" x 10" Square U-bolts, (4) 9/16" U-bolt high nuts and (4) 9/16" U-bolt washers. Install new U-bolts into stock location and torque to 95 ft.lbs.

(See Illustration # 7)

19. Locate (1) 9/16" x 3 1/2" Cam bolt, (2) Cam Washers and (1) 9/16" U-nut. Carefully raise up on hydraulic jack until front axle slides up into the newly installed front axle pivot bracket and secure using new 9/16" cam bolt and hardware. **Special Note: For now adjust cam bolt to the center position. The alignment shop will align to proper specs.**

(See Illustration # 8)

20. Install new shock absorbers and shock boot. Part # SL234 for vehicle manufactured from 1980 -1986. part # LL234 for vehicle manufactured from 1987 - 1996.

21. Re-install the anti-sway into stock location if so equipped.

22. Install tires and wheels

23. Carefully remove jack stand from under the vehicle and lower vehicle to the ground.

24. Check and double check to make sure each step was performed properly.

**Front end installation complete**

25. To begin installation, block the front tires of the vehicle so that the vehicle is stable and can't roll forward. Safely lift the rear of the vehicle and support the frame with jack stands. Place jack stands on both the driver and the passenger side. Next remove the wheels, tires and shock absorbers from both sides.

26. Remove anti-sway bar from stock location, if so equipped.

27. Place a hydraulic jack under the rear differential and safely remove stock U-bolts and U-bolt plate and set aside for later re-installation. Lower hydraulic jack approximately 4".

28. Locate new rear add-a-leaf, (part # TCI-R22) new 3/8" centering bolt and nuts. Working on the driver side place a pair of "C" clamps around rear spring about 2" from the spring clamps. Safely remove stock centering bolt and discard. Install new add-a-leaf to stock spring assembly. **Note: The rear add-a-leaf that is being installed has an off set centering bolt hole, the longer end of the add-a-leaf needs to be installed towards the rear of the vehicle. Install the new rear add-a-leaf into stock spring assembly from shortest to longest, make sure not to install the new rear add-a-leaf under the stock over load. The stock over load is usually the un-arch spring at the bottom of the spring pack.** Secure new add-a-leaf to stock spring assembly with new centering bolt and nut. Torque new centering bolt to 65 ft. lbs. **Special Note: Do not use an impact wrench on the new centering bolt, if an impact wrench is used, the new centering bolt may strip.** Remove the "C" clamps and cut off the excess thread with a suitable cutting tool.

(See Illustration # 9)

29. Re-install stock U-bolts, U-bolt nuts and washers and torque to 110 ft. lbs.

30. Install new shock absorbers and shock boot. Part # LL264. **Special Note: Shocks are not included.**

31. Repeat procedure on passenger side.

32. Re-install anti-sway bar, if so equipped.

33. Install tires and wheels.

34. Check and double check to make sure that rear installation was performed properly.

**Rear End Installation Complete.**

**Take vehicle directly to an alignment shop for proper alignment**

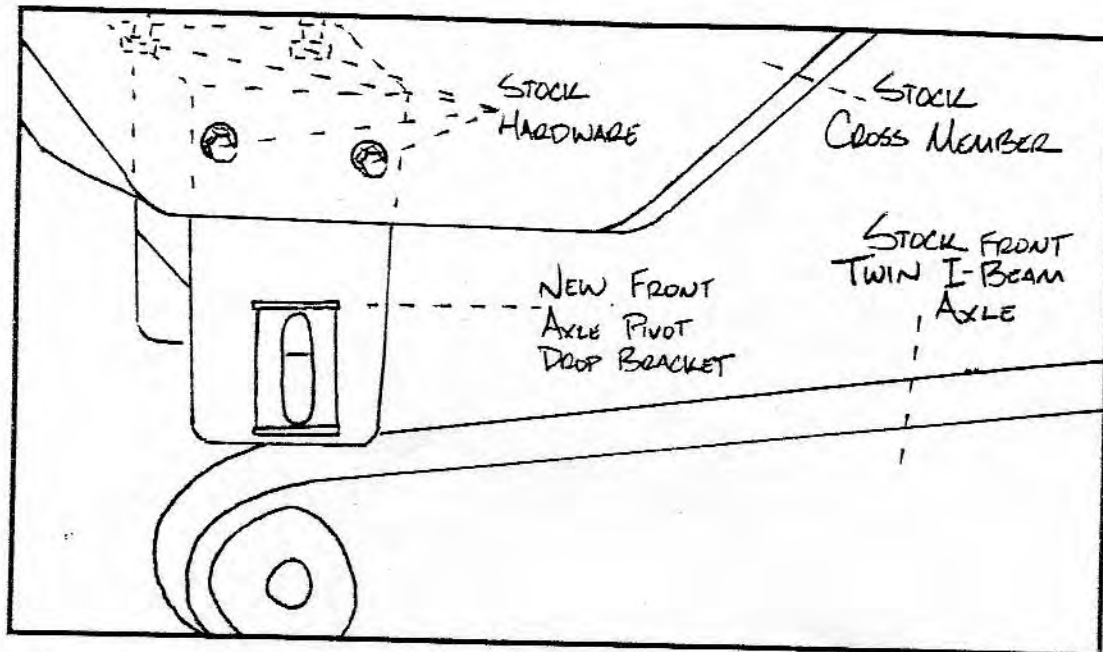


ILLUSTRATION # 1

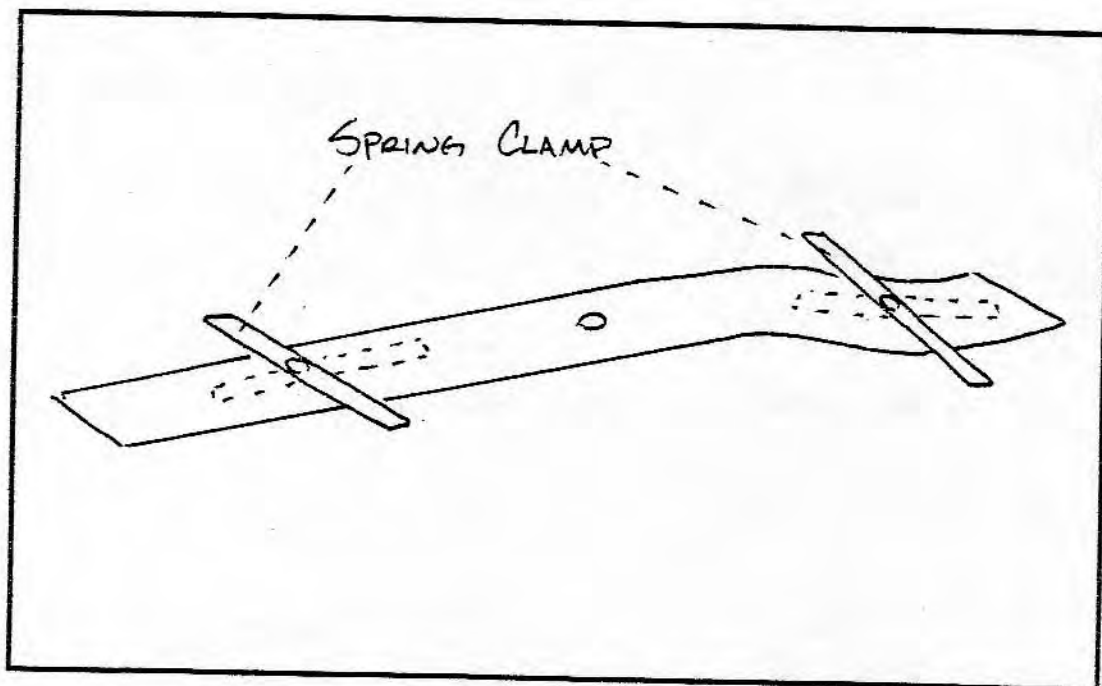


ILLUSTRATION # 2

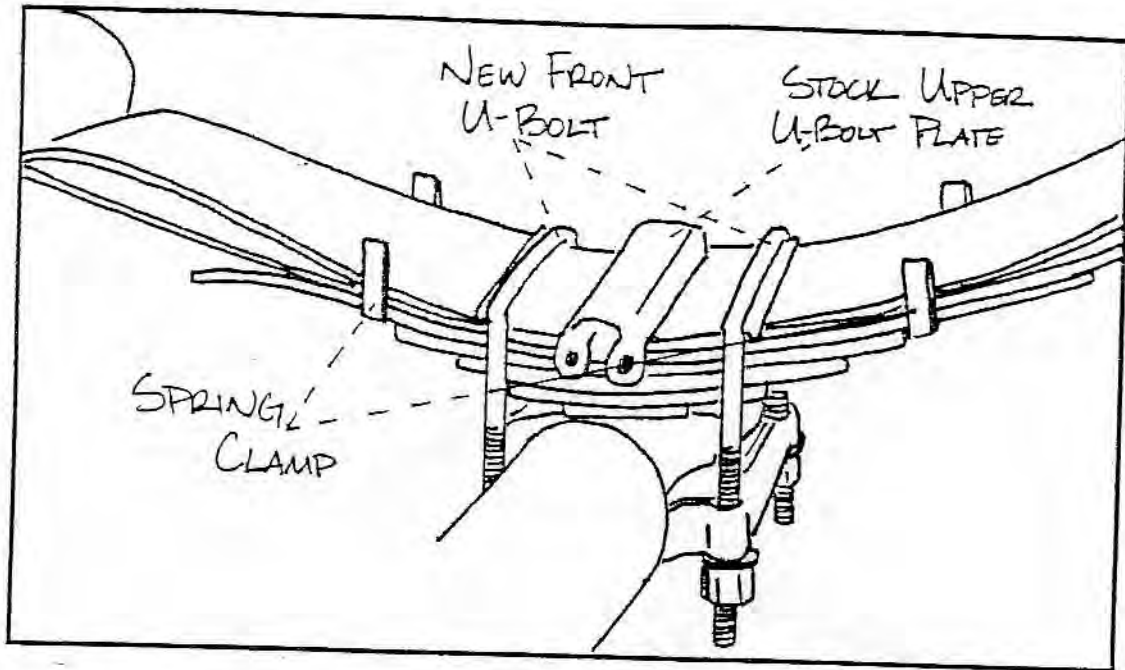


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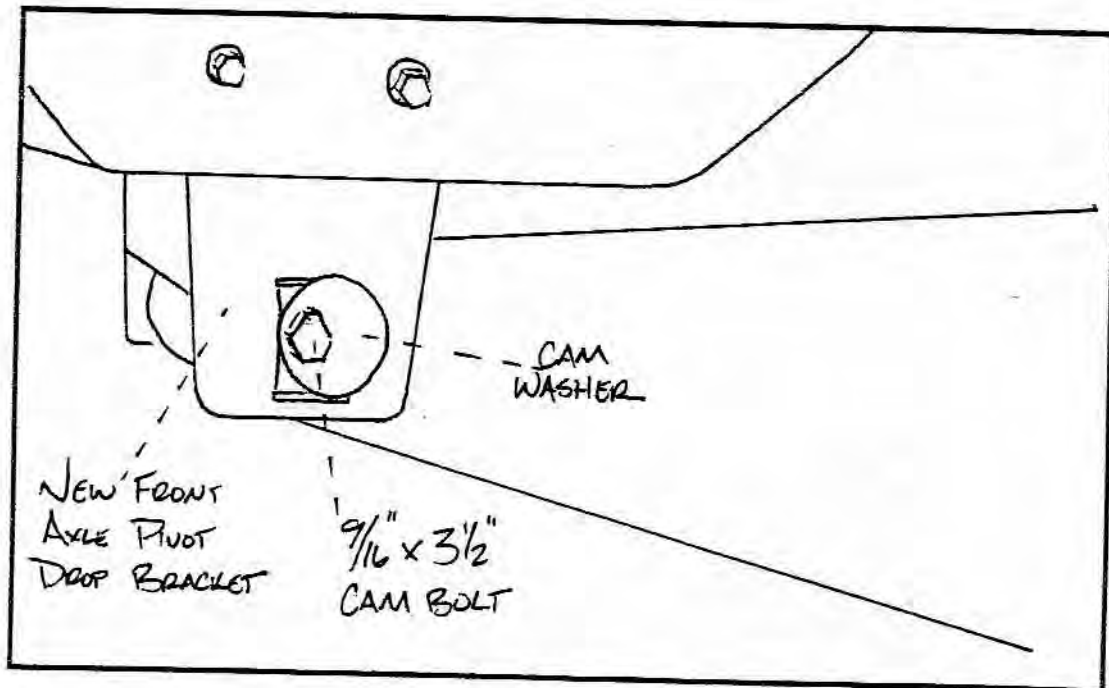


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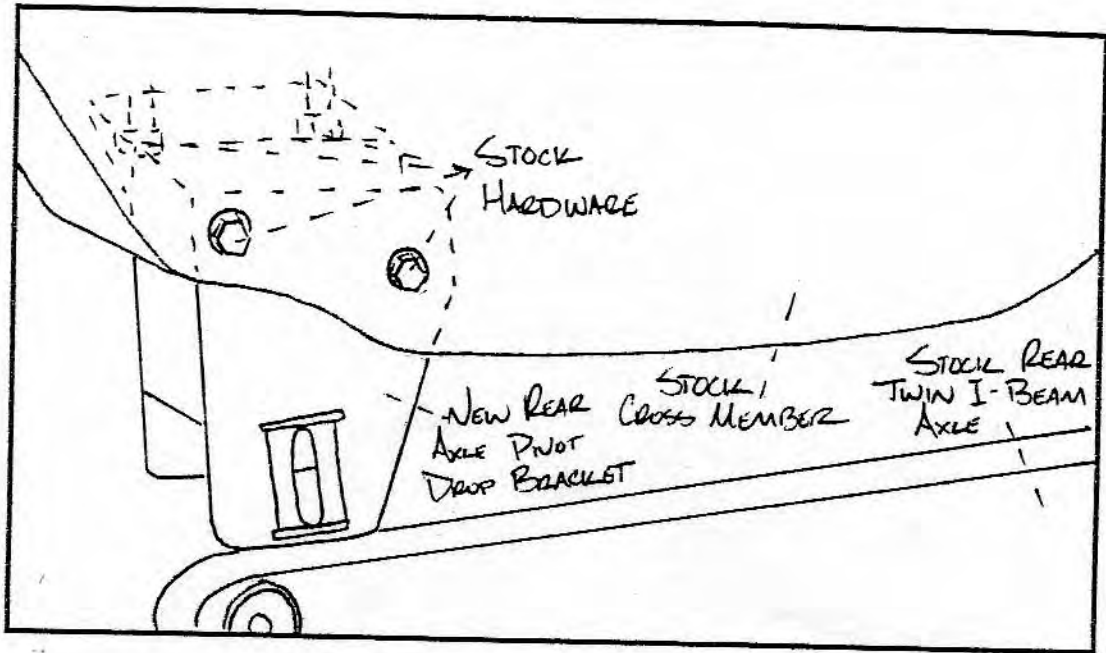


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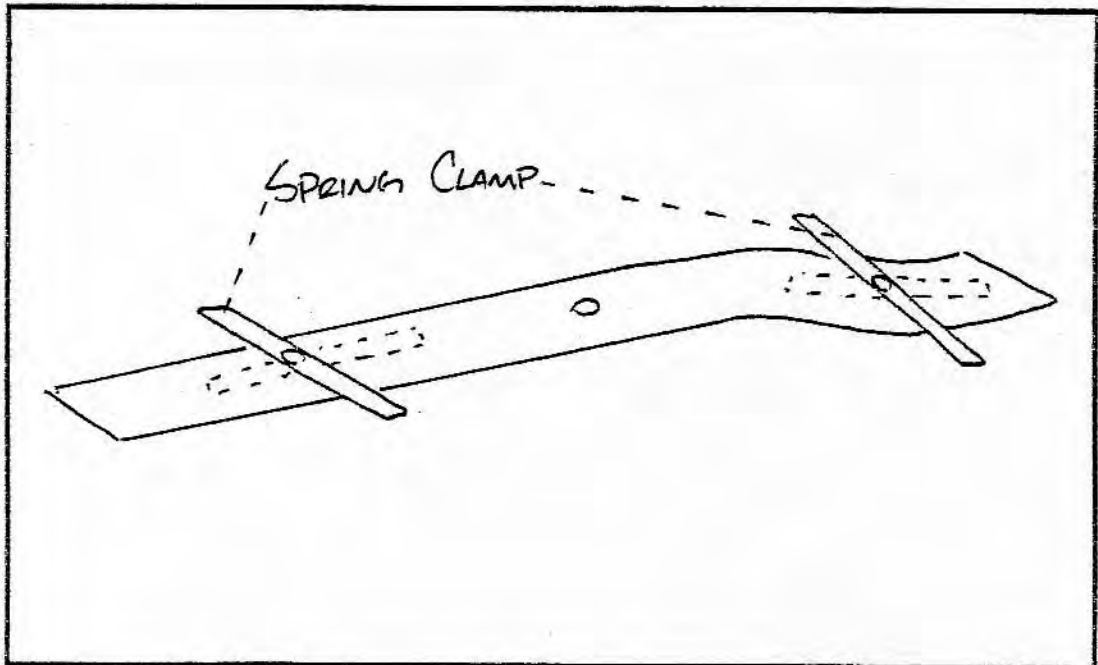


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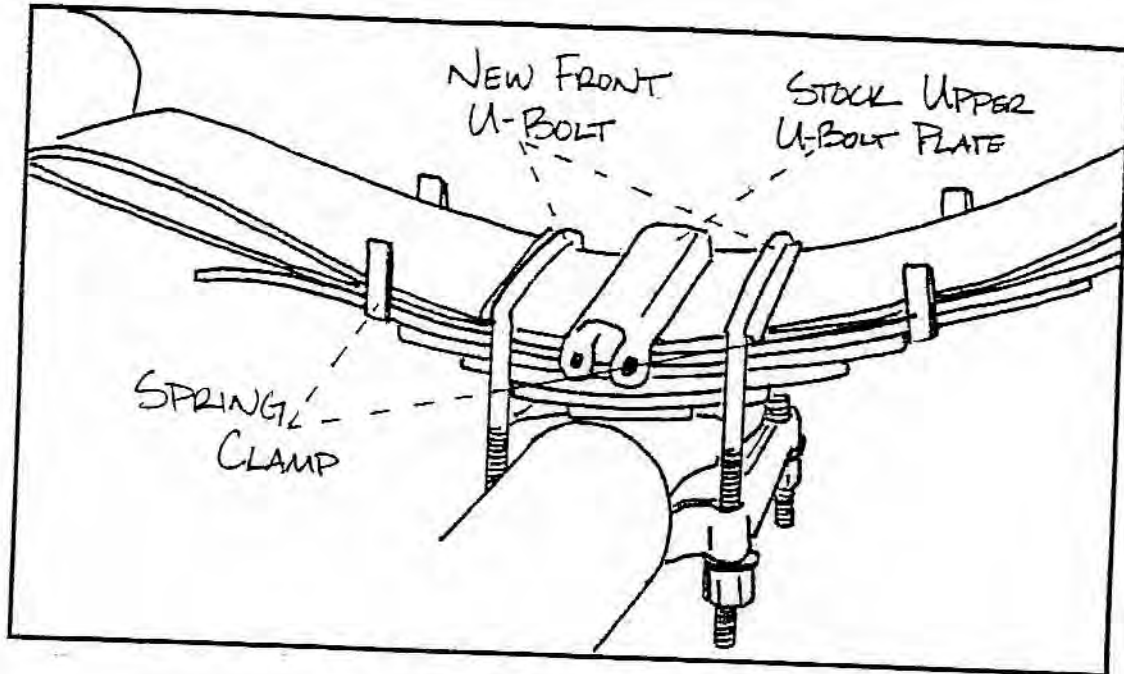


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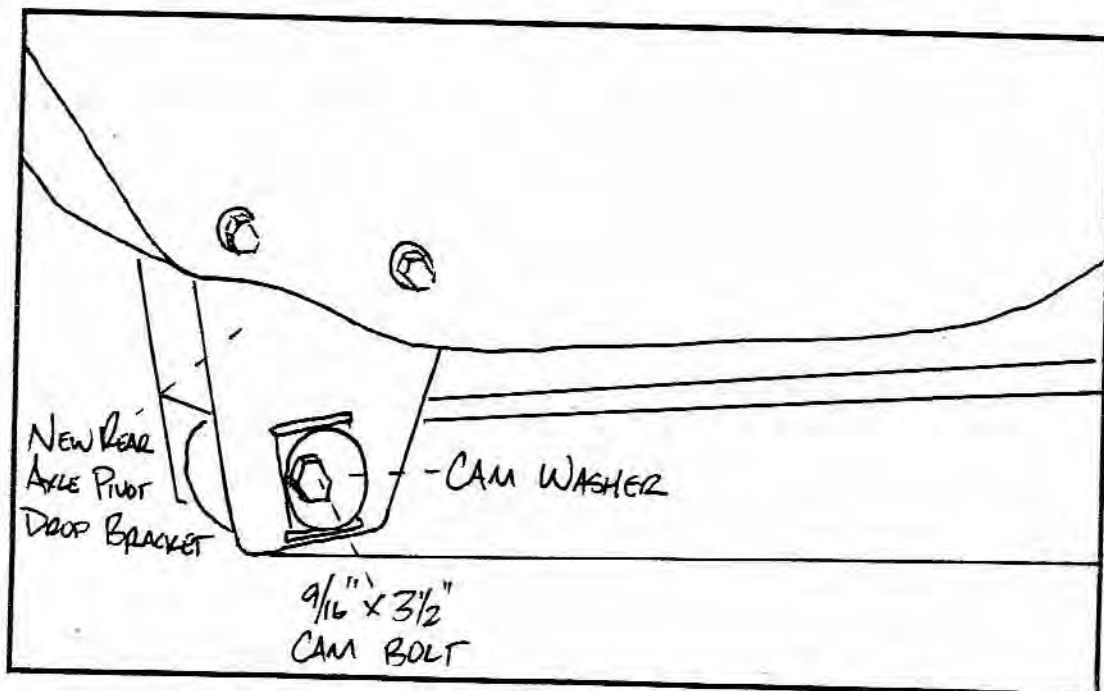


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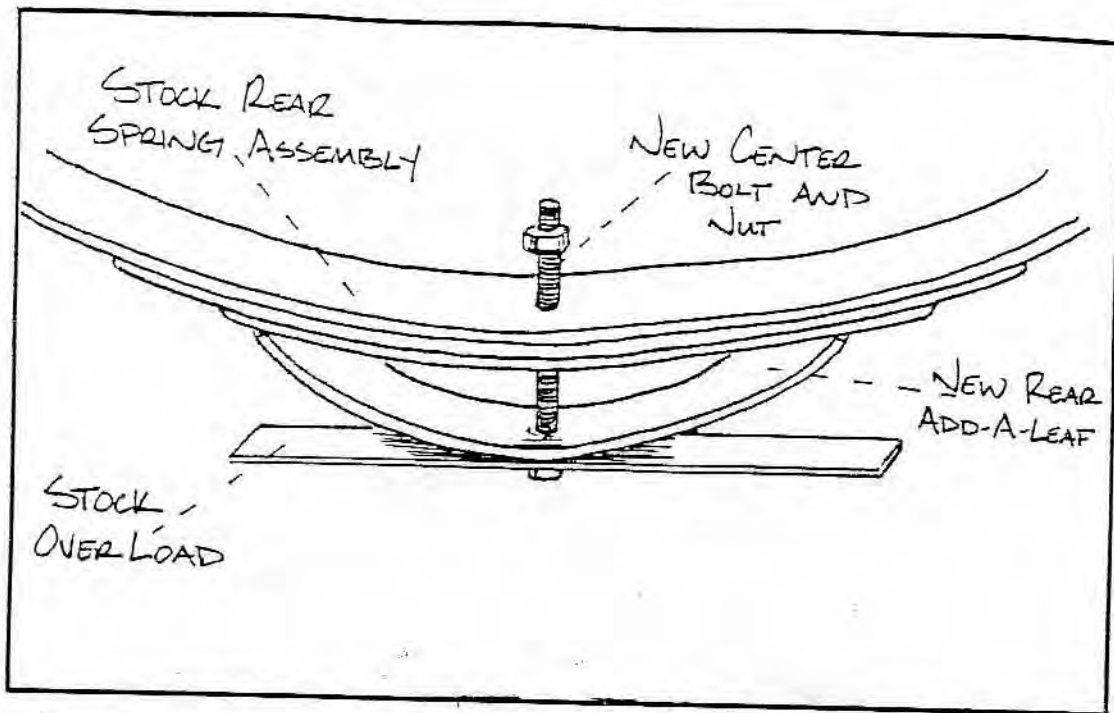
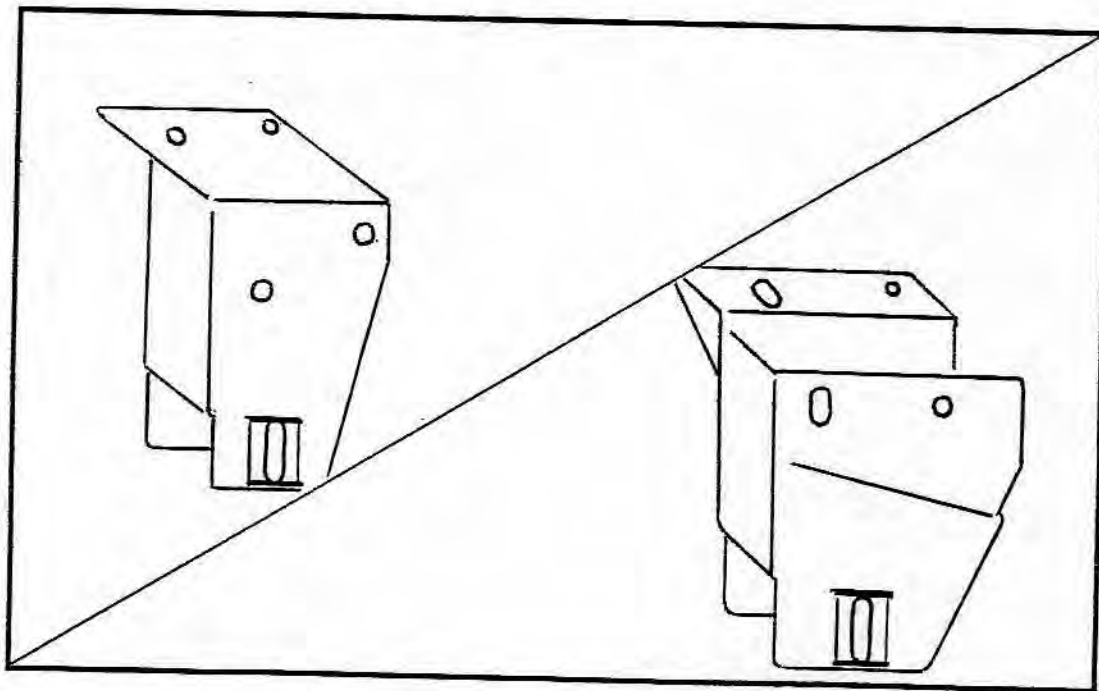


ILLUSTRATION # 9



Top: Front Bracket  
Bottom: Rear Bracket